

PROPOSAL EVALUATION

Proposition 1E Integrated Regional Water Management (IRWM) Grant Program

Stormwater Flood Management Grant, Round 2, 2013

Applicant Contra Costa FCD/WCD	Amount Requested	\$1,097,321
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Proposal Title Grayson and Walnut Creeks Levee Rehabilitation at CCCSD Treatment Plant	Total Proposal Cost	\$2,194,642
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PROJECT SUMMARY

This project raises the existing levees along Grayson and Walnut Creeks to provide increased flood protection for the Central Contra Costa Sanitary District Wastewater Treatment Plant (CCCSD WWTP), located adjacent to the confluence of these two streams. Levees extend from CA Highway 4 to the BNSF Railroad Bridge along the west sides of Grayson and Walnut Creeks.

PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	9/15	Technical Justification	2/10
Budget	3/5		
Schedule	3/5	Benefits and Cost Analysis	21/30
Monitoring, Assessment, and Performance Measures	2/5	Program Preferences	2/10
Total Score (max. possible = 80)			42

EVALUATION SUMMARY

WORK PLAN

The criterion is less than fully addressed and is lacking sufficient rationale. The project description and the tasks are not detailed sufficiently to demonstrate the project can be implemented. The proposal's goals and objectives are not well supported. The purpose and need for the proposal are not well supported such that reviewers could not establish that there is any indication of flood damage involved in current conditions. For example, the applicant claims the current levees do not have adequate freeboard to convey a 200-year event, but does not substantiate this claim, nor demonstrate the WWTP has experienced damages from historical flood events.

BUDGET

The criterion is less than fully addressed and is lacking sufficient rationale and documentation. A summary budget is not provided. An explanation of how the costs were derived (assumptions and justifications) is not provided. The task budget is not consistent with the work plan making it difficult to follow.

SCHEDULE

The schedule is consistent with the work plan and demonstrates a readiness to begin construction in February 2016.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is marginally addressed and documentation is incomplete and insufficient. The information provided does not identify monitoring targets appropriate for the benefits claimed. Only one target and goal was provided in the table, height of the levee. The height of the levee is not an appropriate measurement of monitoring the performance of the project.

TECHNICAL JUSTIFICATION

The proposal lacks documentation that demonstrates the technical adequacy of the project, and the physical benefits are not well described. The potential of flooding at the project site is plausible; however, the applicant does not provide supporting evidence that the WWTP has incurred damages from historical flood events, been threatened by near flood events, probabilities of levee failure and storm occurrence, or levee stability issues justify raising the levee to the proposed 500-year level of protection. The only supporting information for the technical justification section were a cost sheet of how much the equipment would cost to replace if damaged in a flood. The letter included doesn't add justification value to the project and the benefits were not clearly explained. Also, the applicant did not quantify physical benefits correctly. For Example, Table 3 claims only one physical benefit, "Improved Flood Protection for Wastewater Treatment Plant." The quantified benefit is "Increase of 470-year level of protection to treatment plant assets." It is unclear how this translates into actual flood damages. The applicant states the without project conditions are "30-year level of protection to treatment plant assets", but this is not a characterization of existing level of flood damages. The narrative implies the entire WWTP will be catastrophically damaged, but this is not well supported.

BENEFITS AND COST ANALYSIS

Collectively the proposal is likely to provide a high level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking.

The net present value (NPV) of costs is \$1.93 million. Event damages are based on a recent comprehensive survey of assets. Estimated damages from any levee failure are \$146,380,000. The \$146 million in facility damages is the only event cost included in the expected annual damages (EAD) calculation. Documentation to support this claim is not provided. It is assumed that the existing levee system would catastrophically fail in the 1 in 50 year event; however this is not supported. The raised levee is assumed to provide protection for a 1 in 500 year event, although technical justification is lacking. With these assumptions, EAD saving from the project are \$3.635 million annually or \$57.289 million NPV.

The technical drawback to this proposal is that the assumed reliability of the existing levee is not well supported. With its freeboard, the existing levee might have a much better chance of surviving flood events than assumed.

PROGRAM PREFERENCES

Applicant claims that 1 program preference and 5 statewide priorities will be met with project implementation. However, applicant demonstrates a high degree of certainty and adequately documents the magnitude and breadth satisfactorily for 2 preferences. The proposal will achieve the following: (1) Effectively integrate water management programs and projects within hydrologic region identified in the CWP; RWQCB region or subdivision; or other region or sub-region specifically identified by DWR; and (2) Practice Integrated Flood Management.